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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/517,145	12/07/2004	Henrik Ryegard	43315-211142	6834
26694	7590	09/18/2007		
VENABLE LLP P.O. BOX 34385 WASHINGTON, DC 20043-9998			EXAMINER JEN, MINGJEN	
			ART UNIT	PAPER NUMBER
			3609	
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			09/18/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/517,145	RYEGARD ET AL	
	Examiner	Art Unit	
	Ian Jen	3609	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Preliminary Amendment; 12/07/2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>12/07/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The preliminary amendment filed on 12/07/2004 had been entered

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 12 - 15, 17-22 is rejected under 35 U.S.C. 102(b) as being anticipated by Stoddard et al (US Pat No 6697681).

As for claim 12, Stoddard et al shows a control system for controlling one or more manipulators (Abstract, Fig 1), wherein the control system comprises one or more drives that control motors driving the movements of the manipulator (Col 1, lines 10 -46 where the manual motion of the robot is driven by electrical motor and computer program drive means), an axis computer that provides control signals to the drives (Fig 1, Fig 2; Col 3, lines 25 - Col 4, lines 33, shared operating unit 10), and a main computer that is adapted to execute a program with instructions for the movements and that supplies the axis computer with control instructions (Fig 1, Controller 30; Col 3, lines 24-37), wherein the control system comprises physically separated modules adapted such that they may be placed at separated locations and to handle different functions, each of the modules may be surrounded by a casing of its own (Fig 1, Col 2, lines 23 - 41 where each robot has its own control handle with respect to individual functions along placed

Art Unit: 3609

in different location), may have its own power supply and has a well-defined interface in relation to the other modules (Fig 1, Col 4, lines 10 - 33; Col 4, lines 40- 46), wherein said computers and drives are arranged in the modules, and one of said modules is a main computer module, which comprises the main computer, and another of said modules is a drive module, which comprises the axis computer (Fig 1, Col 3, lines 25 - 50).

As for claim 13, Stoddard et al show the control system comprises at least two separate drive modules (Fig 1, Col 3, lines 25-34).

As for claim 14, Stoddard et al shows the control system wherein each drive module is adapted to control a manipulator (Fig 1, Fig 2; Col 4, lines 10- 67).

As for claim 15, Stoddard et al shows the control system wherein drive module comprises a drive unit that includes one or more drives (Fig 1, Fig 2; Col 4, lines 10- 67).

As for claim 17, Stoddard et al shows the control system according wherein one of modules is a control module that comprises the control panel of the control system (Col 3, lines 60 - Col 4, lines 30; Col 4, lines 50- Col 5, lines 15).

As for claim 18, Stoddard et al shows the control system wherein at least some of the modules are adapted to communicate via Ethernet (Col 3, lines 39-43; Col 4, lines 12 -15).

As for claim 19, Stoddard et al shows the control system wherein said manipulator is an industrial robot (Col 1, lines 5-15; Col 3, lines 5 - 23)

As for claim 20, Stoddard et al shows the control system according wherein the control system comprises at least one module (Fig 1, Abstract, Col 3, lines 6-38).

As for claim 21, Stoddard et al shows the use of a control system for controlling an industrial robot (Fig 1, Abstract, Col 3, lines 6-38; Col 1, lines 5-15; Col 3, lines 5 - 23);.

As for claim 22, Stoddard et al shows a method for controlling one or more manipulators (Abstract, Fig 1), wherein the control system comprises drives that control motors driving the movements of the manipulator(Col 1, lines 10 -46 where the manual motion of the robot is driven by electrical motor and computer program drive means), an axis computer that provides control signals to the drives, and a main computer that is adapted to execute a program with instructions for the movements and that supplies the axis computer with control instructions (Fig 1, Fig 2; Col 3, lines 25 - Col 4, lines 33, shared operating unit 10), wherein said one or more computers and drives may be arranged in physically separated modules (Fig 1, Col 2, lines 23 - 41 where each robot has its own control handle with respect to individual functions along placed in different location), each of which may have its own power supply and a well-defined interface in relation to the other modules (Fig 1, Col 4, lines 10 - 33; Col 4, lines 40- 46), wherein the axis computer and the main computer are arranged in separate modules and are brought to communicate with at least one of the other modules (Fig 1, Col 3, lines 25 - 50).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 3609

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stoddard et al (US Pat No 6697681) in view of Matsumoto (US Pat No 6587749).

As for claim 16, Stoddard et al does not show the control system wherein one of modules is a transformer module that includes a transformer. Matsumoto shows the control system wherein one of modules is a transformer module that includes a transformer (Col 2, lines 55-63; Col 3, lines 39-45).

It would have been obvious for one of ordinary skill in the art to provide transformer module as one of modules, as taught by Matsumoto, to Stoddard et al, for providing a driving means for industrial apparatus to accept and convert power source input.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Niedermayr (US Pat No 4611296) shows a industrial robot device.

Brantmark et al (US Pat No 4888708) shows a control system for industrial robot.

Tsuchihashi et al (US Pat No 5404290) shows a industrial robot manipulator.

Onoue et al (US Pat No 6218802) shows a industrial robot system.

Shimogama et al (US Pat No 6374156) shows a robot control system.

Art Unit: 3609

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ian Jen whose telephone number is 571-270-3274. The examiner can normally be reached on Monday - Friday 8:00-5:00 (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Khoi Tran can be reached on 571-272-6916. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Sep 12 2007

Ian Jen

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